

Change in the Specifications of AC Servo Amplifiers Switching Semi-Closed and Fully Closed Loop Controls

Thank you for your continued patronage of the Mitsubishi Electric AC servo system. The specifications will be changed as follows for the operation of MR-J5 and MR-JET switching semi-closed and fully closed loop controls with [Pr. PE01.0 Fully closed loop function selection] set to "1".

1. Target Model

MR-J5/MR-JET

2. Reason for the Change

To improve the operation when semi-closed and fully closed loop controls are switched

3. Details of the Change

(1) Details of the PE01.0 specifications after change

When semi-closed and fully closed loop controls are switched with [Pr. PE01.0 Fully closed loop function selection] set to "1", droop pulses will be cleared. (MR-J4-compatible operation)

(2) Effects from the specification change

In systems where servo motor-side droop pulses are present during semi-closed loop control or load-side droop pulses during fully closed loop control, a shock generated by switching the controls will be reduced. Note that clearing the droop pulses may cause errors in the stop position for conventional operation. In that case, perform homing again after switching semi-closed and fully closed loop controls.

(3) To customers who do not wish to change the specifications

To perform operation in the same way as in servo amplifier firmware version D1 or earlier, change [Pr. PE01.4 Fully closed loop control - Droop pulse clear selection] to "1". For information on PE01.0 and PE01.4, refer to Table 1.

Table 1. Parameters

Parameter No.	Name	Description
PE01.0	Fully closed loop function selection	Select the fully closed loop function. 0: Always enabled 1: Switching by the semi-closed loop control/fully closed loop control switching signal
PE01.4 (Added in version D4)	Fully closed loop control - Droop pulse clear selection	Enable or disable the clearing of the droop pulses for when semi-closed loop control/fully closed loop control switching is performed. 0: Enabled (initial value) 1: Disabled To perform operation in the same way as in servo amplifier firmware version D1 or earlier, set this parameter to "1".

4. Schedule

This change will be made sequentially from the December 2022 production.

Servo amplifiers with firmware version D4 or later will be subject to this change.

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